

PATENT

Docket No: ST00025USU (SIRP.123USU1)

Serial No.: 09/967,136

CLAIMS

1.(Currently Amended). A method for reducing the number of calculations required to correlate an incoming spread spectrum signal received by a GPS receiver and encoded with a pseudorandom code, comprising:

determining, for the spread spectrum signal, mathematical processes that are repeated in a correlation process of the spread spectrum signal made up of in phase (I) signal and quadrature phase (Q) signal data correlated with pseudorandom codes;

removing at least a portion of the mathematical processes that are repeated in the correlation process of the I signal and Q signal data with the pseudorandom codes and results in remaining mathematical processes in the correlation process;

storing the remaining mathematical processes in at least one table; and

using the at least one table during the correlation process to determine when a locally generated pseudorandom code and the incoming pseudorandom code received at the GPS receiver are correlated where the at least one table is constructed for one of the terms of the spread spectrum signal.

2.(Original) The method of claim 1, wherein the mathematical processes are partial accumulations.

3.(Original) The method of claim 2, wherein a portion of the locally generated code and a portion of the incoming pseudorandom code are used to determine correlation of the locally generated code and the incoming pseudorandom code.

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4.(Original) The method of claim 3, wherein the incoming spread spectrum signal is a Satellite Positioning System (SATPS) signal.

5.(Original) The method of claim 4, wherein the SATPS signal is a Global Positioning System (GPS) signal.

6.(Original) The method of claim 5, wherein the table is addressed using at least one data bit of the GPS signal and at least one associated code bit of the GPS signal.

7.(Original) The method of claim 6, wherein the at least one associated code bit is at least four associated code bits, and the at least one data bit is at least four data bytes.

8.(Original) The method of claim 7, wherein the data bytes are represented by In-phase (I) and Quadrature phase (Q) forms.

9-16.(Cancelled)